The Global Resilience Institute believes economic development is most successful when it is supported by close partnership between the public and private sectors in collaboration with civic organizations that engage residents in formulating and supporting a shared vision for their community. Major cities across the United States are beginning to develop such a culture of collaboration, positioning them to take full advantage of incentive programs such as the creation of Opportunity Zones authorized by the Tax Cuts and Jobs Act of 2017, which can put private capital to work in ways that benefit investors and underserved communities alike. The result will be investments that measurably improve economic and social outcomes for all.

Empowering GRI’s Integrated Resilience Action Planning approach for communities is its Resilience Enhancement System, which has been derived from over a decade of applied research in collaboration with several U.S national laboratories and the National Institute of Standards and Technology (NIST). The system has been developed to provide communities with a comprehensive decision-support process to guide the prioritization of their investment needs for enhancing infrastructure and community resilience, thereby reducing risk to the affected community and Opportunity Zone investors while increasing the probability of success for all stakeholders. The Resilience Enhancement System ensures that both community and investor interests are served. Development investments are assessed for community resilience impact, and resilient communities increase the potential value of an investment over the forecasted life-cycle of the project. This dual-focus creates a win-win outcome for all parties.

When deploying the Resilience Enhancement System the GRI team will partner with institutions of higher education and philanthropic organizations who have deep roots in a local community and have earned the trust of its residents. Additionally, GRI collaborates with a stakeholder group made up of local business and industry leaders. Based on the preferences of community leaders, GRI will apply Resilience Enhancement System analysis to a defined geography, such as one or more neighborhoods, single or multiple Opportunity Zones, special tax districts, or an entire metro region. Regardless of the specific scope, the analysis will apply the Resilience Enhancement System analytical method. Using a robust data capture methodology, an evidence-based, resilience indicator assessment, and a dynamic and proven community engagement process, GRI is able to provide a preliminary indication of the likely resilience benefits to be derived from investments in a community. This system provides investors and developers with the knowledge and data necessary to: (1) effectively adapt proposed projects to actual community conditions; (2) discover project modifications or additions that benefit the investor and the community; and (3) achieve tangible and sustainable social and economic progress for the affected region.

By focusing initially on such functions as energy, water, transportation, housing, telecommunications, healthcare, and workforce in terms of capacity, quality and risk, the Resilience Enhancement System provides a unique analysis that identifies strengths, weaknesses and knowledge gaps as well as the interdependencies of critical functions and likely points of failure. The system begins with a GRI-developed Resilience Snapshot of publicly available infrastructure, economic and social data that create an initial portrait of the community. Anchored on indicators of resilience developed over years of academic research and practical experience, the GRI Resilience Snapshot ensures that all assessments are evidence-based and pragmatic.

Engaging with community stakeholders, GRI builds on the Resilience Snapshot to develop the Community Resilience Baseline Assessment. This baseline consists of in-depth integration of publicly available data along with community-held knowledge and context. Robust community interactions that lead to understanding and support for proposed investments are key to successful execution. Much crucial information and highly relevant data are often only available...
by engaging directly with a community. GRI draws on a host of social and infrastructure resilience experts, as well as a consortium of experienced facilitators and community organizers when deploying the Resilience Enhancement System.

GRI and its partners have decades of practical, on-the-ground experience in engaging communities of varying sizes, cultures, demographics, and socio-economic conditions. This ability to couple robust, evidence-based data analysis with highly interactive community involvement ensures a detailed understanding of the baseline resilience conditions that inform both identification of possible resilience-enhancing project opportunities and a detailed analysis of the resilience outcomes of selected projects.

This Project Resilience Enhancement Profile integrates the largely quantitative data of the Snapshot with the largely qualitative understanding gained through the Community Resilience Baseline Assessment and applies it to a specific project. In the Profile, proposed projects are evaluated against the community’s resilience status as described in the Community Resilience Baseline Assessment, providing both an estimation of the changes to resilience trajectory caused by the project and an anticipation of community reaction to the project. The profile may also suggest adaptations to projects, or additional projects that will improve either the current investment’s potential for sustained success or for increasing the resilience of the community overall. If applied to analysis of areas across the City, the Project Resilience Enhancement Profile may suggest priorities for resilience investment based on readiness; broad, city-wide resilience outcomes that can serve as the basis of a multi-phase resilience building strategy, or project types and project considerations that will increase likely success of future development.

Building resilience within and across multiple levels requires a comprehensive effort that matches the complexity of the increasingly interdependent systems and networks we all rely on. Our university-wide interdisciplinary institute at Northeastern University, integrates expertise in science, healthcare, engineering, law, behavioral sciences, public policy, and business in identifying and advancing meaningful resilience solutions.

Integration of knowledge and collaboration in its application are the indispensable ingredients of building a more resilient world. The Global Resilience Institute stands ready to share its expertise and partner with those who share our commitment to respond to the resilience imperative.

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About GRI

Launched in 2017 with the approval of Northeastern University’s Board of Directors, the Global Resilience Institute (GRI) is the world’s first university-wide institute to respond to the resilience imperative. Today, GRI undertakes multi-disciplinary resilience research and education efforts that draws on the latest findings from network science, health sciences, coastal and urban sustainability, engineering, cybersecurity and privacy, social and behavioral sciences, public policy, urban affairs, business, law, game design, architecture, and geospatial analysis.